

The production of null subjects by Greek-Italian bilingual children: Teasing apart transfer and developmental effects

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Several studies on bilingual reference production have shown that bilinguals speaking a null-subject (NS) and a non-null-subject (NNS) language combination tend to produce overt pronouns in contexts in which the use of a NS would be more appropriate (i.e., when maintaining reference to a discourse referent; e.g., Serratrice et al., 2004; Sorace & Filiaci, 2006; Belletti et al., 2007). In other terms, these bilinguals produce overspecified (redundant) forms. This tendency has been analyzed in terms of cross-linguistic influence (CLI) from the NNS to the NS language. However, the evidence is less clear when considering the combination of two NS languages. Sorace et al. (2009) found that Italian-Spanish bilinguals produce overt pronouns in Italian, which could be interpreted in terms of either CLI (Spanish is more tolerant to overt subjects in maintenance contexts) or processing: Overt pronouns are the default options that bilingual use, whenever they fail to integrate syntactic representations with discourse information in real time (Sorace, 2011). Furthermore, when considering bilingual language acquisition, CLI and processing effects may interact with developmental factors: Children may produce ambiguous null subject, due to developing Theory of Mind (ToM) – Hendriks (2016).

The present study investigates which factors underlie bilingual production of NS, by considering the production of NS in Italian by bilinguals speaking a combination of NS languages, i.e., Italian and Greek. In particular, the study builds on studies (both comprehension and production data: Torregrossa, Bongartz & Tsimpli, 2015; Torregrossa & Andreou, in preparation) showing that Greek NS are ‘freer’ in their reference possibilities than Italian NS, being able to refer to both subject and object antecedents. On the contrary, Italian NS exhibit a greater subject bias (Carminati, 2002). If bilingual reference production were mainly affected by processing constraints, Greek-Italian bilingual children would tend to produce overspecified overt pronouns (in line with Sorace, 2011). On the contrary, CLI should lead to an extension of the reference possibilities for Italian NS, according to the pattern shown by Greek. This would correspond to the production of (ambiguous) NS referring to both subject and object antecedents. Furthermore, we will control the production of ambiguous NS for developmental factors.

40 Greek-Italian bilingual children (age-range: 8.00-11.8, M: 9.5) – living in Athens and attending a Greek-Italian bilingual school – took part in the study. We designed an experimental battery for the assessment of their reference production skills: i) two sentence repetition tasks (SRT) tapping the syntactic representations of the language-specific referential systems; ii) two Theory-of-Mind task (Silent movies, Devin & Hughes, 2013); iii) an updating task (on-line monitoring and manipulation of information), to assess children’s processing abilities; iv) a narrative production task (Schneider et al., 2005) eliciting referring expressions (REs) in Italian. We also administered each child a questionnaire, targeting home language history, current language use and current literacy, as a proxy for language experience.

For the analysis of the narratives, we coded NS for factors affecting the accessibility of their referents (Arnold, 2010), i.e., grammatical role of the antecedent (subject vs. object) and number

of characters (of the same or different gender) intervening between the NS and its antecedent. Then, we identified referential configurations indicating an underspecific (i.e., ambiguous) use of NS (use of a null when the antecedent is an object, with or without intervening characters).

The results show that in Italian, bilingual children produce underspecific NS that refer to object antecedents, as shown by sentences (1) and (2). Very few instances of overt pronouns could be observed.

(1) [E infine (l'elefante) ha preso il palloncino]. L'ha dato **al giraffino**₁ e \emptyset ₁ si è riempito di gioia.
[and at the end the elephant took the balloon]. He gave it to the giraffe boy and \emptyset (he) was full with joy].

(2) E l'elefante cercava di prendere il **giocattolo dall'acqua**, ma \emptyset diceva che \emptyset era troppo lontano.
[and the elephant tried to take the toy from the water, but \emptyset (he) was saying that \emptyset (it) was too far away].

Interestingly, there is no significant correlation between the number of produced underspecific NS and the scores in the updating and ToM tasks. Rather, the results of the SRT as well as measures of language experience (questionnaires) are the only significant predictors of the use of underspecific forms (i.e., of the extension of the reference possibilities of Italian NS according to the Greek pattern).

In other terms, among the bilinguals considered in this study, the production of underspecific NS is not motivated by developmental factors, as shown by the absence of correlation with ToM scores. Nor could processing limitations account for the observed pattern of production (very few overt pronouns were produced and there was no correlation with processing measures). Rather, the syntax-discourse interface analysis of null subjects – coupled with the results of the correlational analyses involving the SRT-scores and the questionnaires – suggests that the production of underspecific forms is an effect of CLI of the Greek pattern of use of null subjects to Italian.

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